Maryland Historical Trust

Maryland Inventory of Historic Properties number: B-4612.

Name: CLIPPER MILL RD. OVER JONES FALLS STREAM.

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST

Eligibility Recommended _____ Eligibility Not Recommended __X____

Criteria: ____A ____B __X__C ____D Considerations: ___A ___B ___C ___D ___E ___F ___G __None

Comments: _____

_____

_____

Reviewer, OPS: _Anne E. Bruder_____ Date: __3 April 2001____

Reviewer, NR Program: __Peter E. Kurtze_____ Date: __3 April 2001____

MARYLAND INVENTORY OF HISTORIC BRIDGES **MHT No.** B-4612
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION/
MARYLAND HISTORICAL TRUST

SHA Bridge No. BC 3001 **Bridge name** Clipper Mill Road over Jones Falls Stream

LOCATION:
Street/Road name and number [facility carried] Clipper Mill Road

City/town Baltimore **Vicinity** _____

County Baltimore

This bridge projects over: Road____ **Railway**_____ **Water** X **Land** ____

Ownership: State _____ **County** _____ **Municipal** X **Other** _____

HISTORIC STATUS:
Is the bridge located within a designated historic district? Yes _____ **No** X
National Register-listed district ____ **National Register-determined-eligible district** __
Locally-designated district _____ **Other** _____

Name of district _____

BRIDGE TYPE:
Timber Bridge _____:
Beam Bridge _____ **Truss -Covered** ___ **Trestle** ____ **Timber-And-Concrete** ___

Stone Arch Bridge _____

Metal Truss Bridge _____

Movable Bridge ____:
Swing _____ **Bascule Single Leaf** __ **Bascule Multiple Leaf** _____
Vertical Lift _____ **Retractile**_____ **Pontoon** _____

Metal Girder X _____:
Rolled Girder _____ **Rolled Girder Concrete Encased** _____
Plate Girder X **Plate Girder Concrete Encased** _____

Metal Suspension _____

Metal Arch _____

Metal Cantilever _____

Concrete _____:
Concrete Arch_____ **Concrete Slab**_____ **Concrete Beam** ____ **Rigid Frame** _____
Other _____ **Type Name** _____

B-4612

DESCRIPTION:
Setting: Urban ___X___ **Small town** _____ **Rural** _____

Describe Setting:

Bridge No. BC 3001 carries Clipper Mill Road over Jones Falls Stream in Baltimore City. Clipper Mill Road runs east-west and Jones Falls Stream flows north-south. The bridge is located in the City of Baltimore, and is surrounded by commercial development and multi-family dwellings.

Describe Superstructure and Substructure:

Bridge No. BC 3001 is a 2-span, 1-lane, metal girder bridge. The bridge was originally built in 1920, and according to 1935 reconstruction plans of the bridge, the intermediate pier was replaced in 1935. The plans also indicate that the bridge once had a metal railing that was removed at an unknown date. The structure is 67 feet long and has a clear roadway width of 20 feet. The out-to-out width is 22 feet. The superstructure consists of two (2) plate girders which support a 2-layer, timber deck and a chain-link, pedestrian barrier. The girders are 12 inches x 39 inches and are spaced 22 feet apart. Each span between the two (2) steel plate girders contains two (2) intermediate steel floorbeams, and there is a steel channel floorbeam at the end of each span. There are six (6) steel stringers and two (2) steel channel stringers between each floorbeam. The roadway is carried through the girders. The timber deck is 6 inches thick. The structure has a chain-link, pedestrian barrier and the roadway approaches from T-intersections at both the east and west approach to the bridge. The substructure consists of two (2) concrete abutments and an intermediate, concrete pier at mid-length. There are four (4), flared, concrete wing walls. The sufficiency rating for the bridge was unavailable.

According to the 1995 inspection report, this structure is in poor condition with the steel plate girders and rolled floorbeams containing corrosion. The timber deck has many areas of splitting and large areas of rot throughout the structure. The concrete has spalling and cracking in the bearing area, and a 1/4-inch wide vertical crack in the center of the east abutment stem. The pier has heavy scaling at the waterline. The chain-link, pedestrian barrier has bent posts and detached rails.

Discuss Major Alterations:

The original concrete pier was replaced with the existing pier in 1935. Also, the original metal railing was removed and replaced with a pedestrian barrier at an unknown date.

HISTORY:

WHEN was the bridge built: 1920
This date is: Actual ___X___ **Estimated** _____
Source of date: Plaque ____ **Design plans** ___ **City bridge files/inspection form** _X_
Other (specify)

WHY was the bridge built?

The bridge was constructed in response to the need for more efficient transportation network and increased load capacity.

WHO was the designer?

Unknown

WHO was the builder?

Unknown

WHY was the bridge altered?

The bridge was altered to correct functional or structural deficiencies.

Was this bridge built as part of an organized bridge-building campaign?

There is no evidence that the bridge was built as part of an organized bridge building campaign.

SURVEYOR/HISTORIAN ANALYSIS:

This bridge may have National Register significance for its association with:
A - Events _____ B- Person _____
C- Engineering/architectural character _____

The bridge does not have National Register significance.

Was the bridge constructed in response to significant events in Maryland or local history?

Metal girder bridges were most likely introduced and first popularized in Maryland by the state's major railroads of the nineteenth century including the Baltimore and Susquehanna, its successor the Northern Central, and the Baltimore and Ohio Railroad. Bridge engineering historians have documented the fact that James Milholland (or Mulholland) erected the earliest plate girder span in the United States on the Baltimore and Susquehanna Railroad in 1846 at Bolton Station, near present-day Mount Royal Station. The sides (web) and bottom flange of Milholland's 54-foot-long span were wholly of wrought iron and included a top flange reinforced with a 12x12-inch timber. Plates employed in the bridge were 6 feet deep and 38 inches wide, giving the entire bridge a total weight of some 14 tons. Milholland's pioneering plate girder cost $2,200 (Tyrrell 1911:195). By December 31, 1861, the Northern Central Railroad, which succeeded the Baltimore and Susquehanna, maintained an operating inventory in Maryland of 50 or more bridges described simply as "girder" spans, in addition to a number of Howe trusses. Most of these were probably iron girder bridges; the longest were the 117-foot double-span bridge over Jones Falls and the 106-foot double-span girder bridge at Pierce's Mill (Gunnarson 1990:179-180).

As in the nation, girder bridge technology in Maryland was quickly adapted to cope with the increasingly heavy traffic demands of the twentieth century caused by automobile and truck traffic. The 1899 Maryland Geological Survey report on highways noted that "there are comparatively few I-beam bridges, one of the cheapest and best forms for spans less than 25 or 30 feet" (Johnson 1899:206). Interestingly, the report also urged construction of a composite metal, brick, and concrete bridge, noting that "no method of construction is more durable than the combination of masonry and I-beams, between which are transverse arches of brick, the whole covered with concrete, over which is laid the roadway" (Johnson 1899:206). Whether any such bridges (transitional structures between I-beams and reinforced concrete spans) were built is unknown.

Official state and county highway reports—issued between 1900 and the early 1920s through the Highway Division of the Maryland Geological Survey and its successor, the State Roads Commission—generally do not reference or describe girder construction. An analysis of the current statewide listing of county and municipal bridges (a listing maintained by the State Highway Administration) reveals that 48 county bridges, out of the total of 141 approximately dated to "1900" by county engineers, were listed as steel girder, steel stringer, or variants of such terms. (It should be noted that the "1900" date is often given when no exact date is pinpointed for a bridge that is clearly old). A grand total of 200 bridges (including "steel culverts"), out of 550 bridges dated on the county list between 1901 and 1930, were described as steel beam, steel girder, or steel stringer and girder varieties. The total suggests that among the various highway bridge types built in the early twentieth century metal girder bridges in Maryland between 1900 and 1930 were second in popularity only to reinforced concrete bridges. However, these numbers must be interpreted with caution, as they do not necessarily include all county and municipal bridges.

When the bridge was built and/or given a major alteration, did it have a significant impact on the growth and development of the area?

There is no evidence that the construction of this bridge had a significant impact on the growth and development of this area.

Is the bridge located in an area which may be eligible for historic designation and would the bridge add to or detract from the historic/visual character of the potential district?

The bridge is located in an area which does not appear to be eligible for historic designation.

Is the bridge a significant example of its type?

A significant example of a metal girder bridge should possess character-defining elements of its type, and be readily recognizable as an historic structure from the perspective of the traveler. The integrity of distinctive features visible from the roadway approach, including parapet walls or railings, is important in structures which are common examples of their type. In addition, the structure must be in excellent condition. This bridge no longer retains the integrity of distinctive features visible from the roadway, because the original metal railing was removed and replaced with a pedestrian barrier at an unknown date. The structure also does not possess all of its original character-defining elements, as the original concrete pier was replaced in 1935. Because the integrity of its character-defining elements and distinctive features visible from the roadway has been altered, the structure is an undistinguished example of a metal girder bridge.

Does the bridge retain integrity of important elements described in Context Addendum?

This bridge was reconstructed in 1935, resulting in the loss of such character-defining elements as the original concrete pier.

Is the bridge a significant example of the work of a manufacturer, designer, and/or engineer

This bridge is not a significant example of the work of a manufacturer, designer, and/or engineer.

Should the bridge be given further study before an evaluation of its significance is made?

No further study of this bridge is required to evaluate its significance.

B-4612

BIBLIOGRAPHY:

City inspection/bridge files X **SHA inspection/bridge files** _____
Other (list):

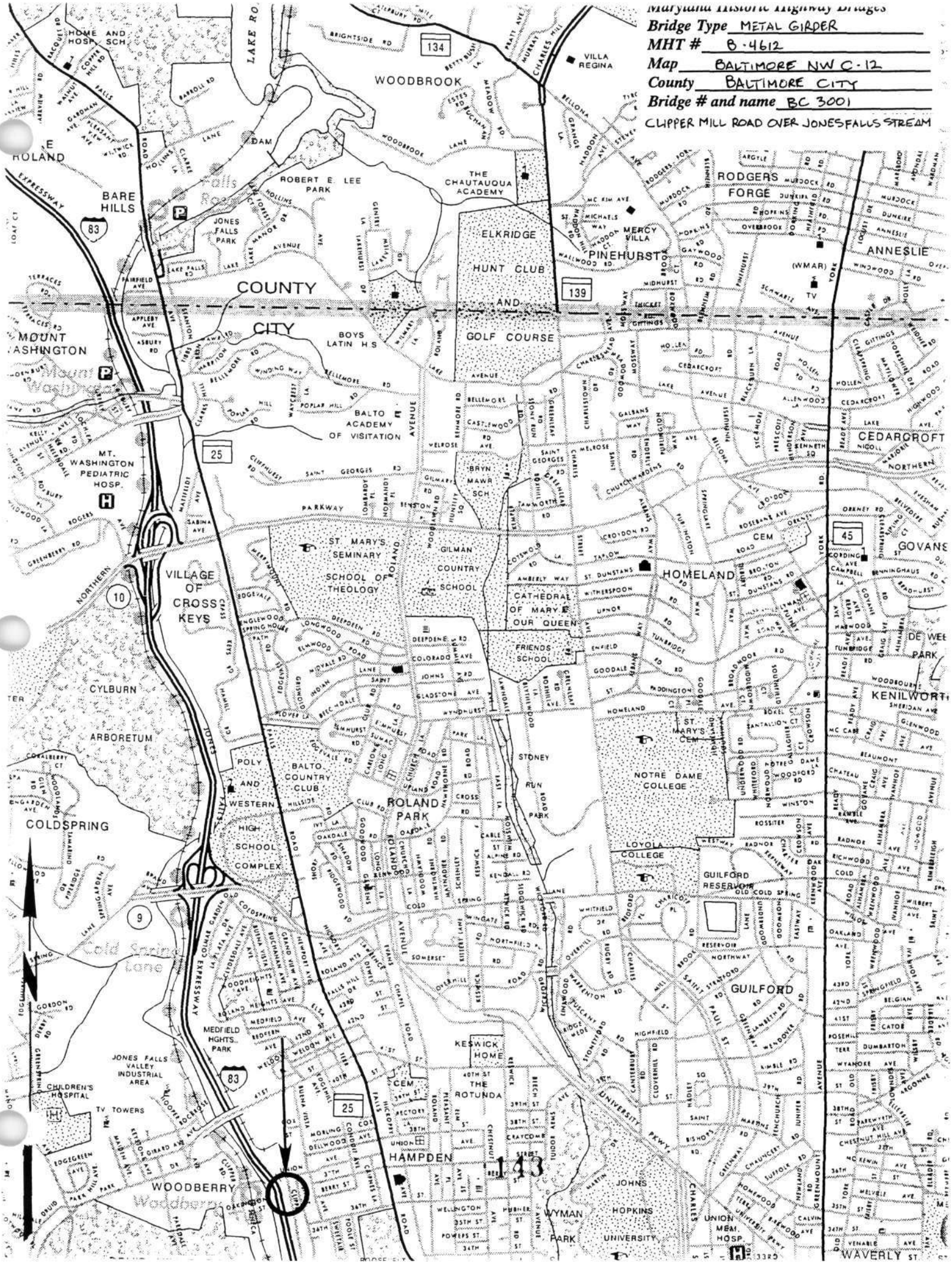
Gunnarson, Robert
1990 *The Story of the Northern Central Railway, From Baltimore to Lake Ontario*. Greenberg Publishing Co., Sykesville, Maryland.

Johnson, Arthur Newhall
1899 The Present Condition of Maryland Highways. In *Report on the Highways of Maryland*. Maryland Geological Survey, The Johns Hopkins University Press, Baltimore.

Tyrrell, Henry G.
1911 *History of Bridge Engineering*. Published by author, Chicago.

SURVEYOR:

Date bridge recorded 3/5/97
Name of surveyor Caroline Hall/Eric F. Griffitts
Organization/Address P.A.C. Spero & Co., 40 W. Chesapeake Avenue, Baltimore, MD 21204
Phone number(410) 296-1685 **FAX number** (410) 296-1670


Maryland Historic Highway Bridges
Bridge Type METAL GIRDER
MHT # B-4612
Map BALTIMORE NW C-12
County BALTIMORE CITY
Bridge # and name BC 3001
CLIPPER MILL ROAD OVER JONES FALLS STREAM
WOODBROOK
ROBERT E. LEE PARK
THE CHAUTAUQUA ACADEMY
BARE HILLS
JONES FALLS PARK
ELKRIDGE HUNT CLUB AND GOLF COURSE
COUNTY CITY
BOYS LATIN H.S.
BALTO ACADEMY OF VISITATION
MT. WASHINGTON PEDIATRIC HOSP.
ST. MARY'S SEMINARY SCHOOL OF THEOLOGY
GILMAN COUNTRY SCHOOL
VILLAGE OF CROSS KEYS
CATHEDRAL OF MARY OUR QUEEN
FRIENDS SCHOOL
HOMELAND
RODGERS FORGE
PINEHURST
ANNESLIE
CEDARCROFT
GOVANS
KENILWORTH
DE WEE PARK
ARBORETUM
CYLBURN
POLY AND WESTERN HIGH SCHOOL COMPLEX
BALTO COUNTRY CLUB
ROLAND PARK
STONEY RUN PARK
NOTRE DAME COLLEGE
ST. MARY'S CEM.
LOYOLA COLLEGE
GUILFORD RESERVOIR
GUILFORD
COLDSPRING
MEDFIELD HGHTS. PARK
JONES FALLS VALLEY INDUSTRIAL AREA
CHILDREN'S HOSPITAL
TV TOWERS
KESWICK HOME
THE ROTUNDA
HAMPDEN
WOODBERRY
WYMAN PARK
JOHNS HOPKINS UNIVERSITY
UNION MEM. HOSP.
WAVERLY
MERCY VILLA
(WMAR) TV
VILLA REGINA
HOME AND HOSP. SCH
LAKE ROLAND
ROLAND
EXPRESSWAY
NORTHERN
JONES FALLS
LAKE AVENUE
ROLAND AVENUE
CHARLES
YORK
139
134
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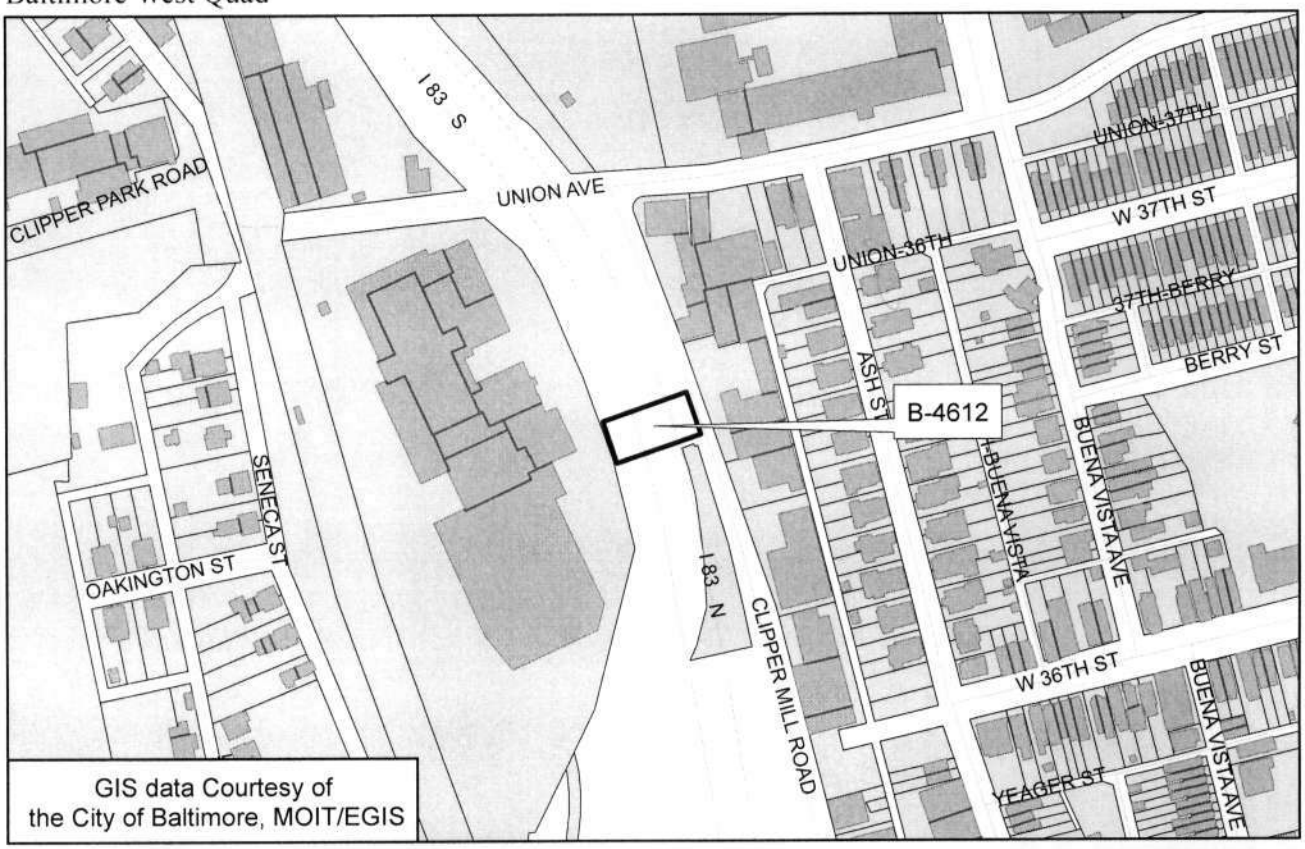
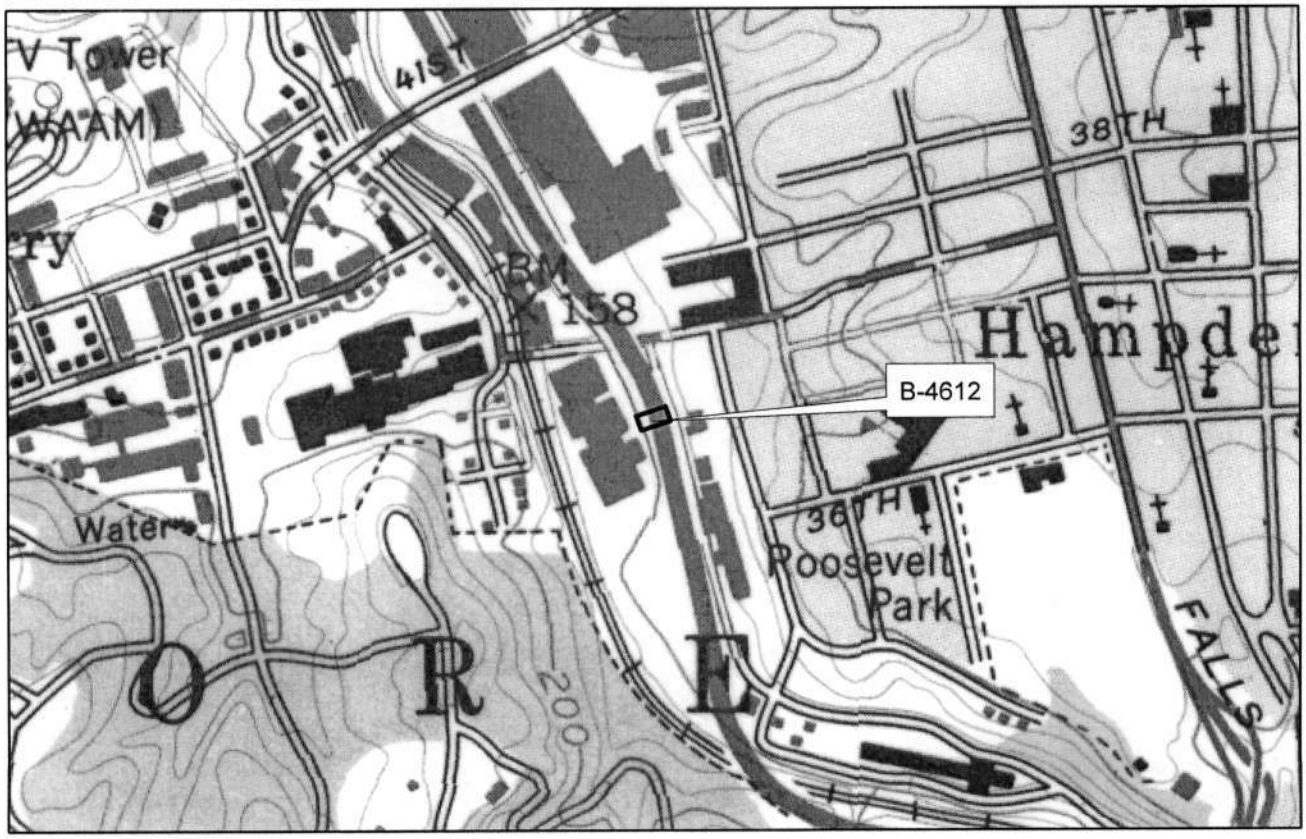
83
45
10
9
143

B-4612
Bridge 3001
Clipper Mill Road over Jones Falls Stream
Baltimore City
Baltimore West Quad





1. B-4612
2. Clipper mill Dover (Gunpowder Falls) Stream
3. Baltimore City (BC 3001)
4. Eric Griffiths
5. 3-97
6. MD SHPO
7. West approach
8. 1 of 6

1. B 4612
2. Clippership Rd. nr Jones Falls Stream
3. Baltimore City (BC-3001)
4. Eric Griffiths
5. 3-97
6. MD SHPO
7. South Elevation
8. 296

1. B-4612
2. Cuppernell Rd. over Jones Falls Stream (BC 3001)
3. Baltimore City
4. Eric Griffiths
5. 3-97
6. MS SHPO
7. Detail of Stringers & Girders
8. 3 of 6

1. B-1612
2. Clipper Mill Bridge over Jones Falls Stream
3. Baltimore City (BC 3001)
4. Eric Griffitts
5. 3-97
6. MD SHPO
7. North Elevation
8. 4 of 6

1. B-4612
2. Coppinville Rd. over Jones Falls Stream
3. Baltimore City (BC-3001)
4. Eric Yuffitt
5. 3-97
6. MD SHPO
7. North Elevation
8. 5 of 6


SPEED
BUMP
AT
BRIDGE

1. B-4612
2. Clipper Mill Rd. over Jones Falls Stream
3. Baltimore City (BC 3001)
4. Eric Huffstetler
5. 3-97
6. MD SHPO
7. Last Approach
8. 6086